

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/40920

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04B 7/00**

USPC: 455/515,516,517,518,519,520,521

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/515,516,517,518,519,520,521

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,032,051 A (HALL et al.) 29 February 2000 (29.02.2000), Figures 4, 17, Cols. 2 lines 1-9, 3 lines 4-15, 3 lines 29-43, 4 lines 8-21, 5 lines 65-67, 6 lines 1-2, 6 lines 54-60	1-44

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

05 January 2007 (05.01.2007)

Date of mailing of the international search report

22 FEB 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

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Authorized officer

Raymond S. Dean

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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
PHILIP R. WADSWORTH
QUALCOMM INCORPORATED
5775 MOREHOUSE DRIVE
SAN DIEGO, CA 92121-1714

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 030640WO		Date of mailing <i>(day/month/year)</i> 22 FEB 2007
International application No. PCT/US04/40920		International filing date <i>(day/month/year)</i> 07 December 2004 (07.12.2004)
International Patent Classification (IPC) or both national classification and IPC IPC: H04B 7/00 USPC: 455/515,516,517,518,519,520,521		Priority date <i>(day/month/year)</i> 12 January 2004 (12.01.2004)
Applicant QUALCOMM INCORPORATED		

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input checked="" type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 05 January 2007 (05.01.2007)	Authorized officer Raymond S. Dean Telephone No. 571-272-7877
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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-44</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-44</u>	NO
Industrial applicability (IA)	Claims <u>1-44</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Claim 1 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:
The word "sending" in Claim 1 is misspelled

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

1. Claims 20, 39 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 20, 39 are indefinite for the following reason(s):

 Claim 20 should depend on Claim 19 as opposed to Claim 1 for proper antecedent basis. Claim 39 should depend on Claim 35 as opposed to Claim 25 for proper antecedent basis. Appropriate correction is required.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

1. Claim 1 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:
The word " sending" in Claim 1 is misspelled
2. Claims 20, 39 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 20, 39 are indefinite for the following reason(s):
Claim 20 should depend on Claim 19 as opposed to Claim 1 for proper antecedent basis. Claim 39 should depend on Claim 35 as opposed to Claim 25 for proper antecedent basis. Appropriate correction is required.
3. Claims 1-44 lack novelty under PCT Article 33(2) as being anticipated by Hall et al. (6,032,051).
Regarding Claim 1, Hall teaches a method for sharing user information in a wireless communication network, the method comprising: sending an alert from an originator to a target, the alert including information about the originator and requesting information about the target (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator from the target in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target, based on the received information (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).
Regarding Claim 7, Hall teaches a computer-readable medium embodying codes for implementing a method for sharing user information in a wireless communication network (Cols. 3 lines 4 - 15, 5 lines 65 - 67, 6 lines 1 - 2), the method comprising: sending an alert from an originator to a target, the alert including information about the originator and requesting information about the target (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator from the target in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target, based on the received information (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).
Regarding Claim 13, Hall teaches an apparatus for sharing user information in a wireless communication network, comprising: means for sending an alert from an originator to a target, the alert including information about the originator and

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Claim 1 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:
The word " sending" in Claim 1 is misspelled

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

1. Claims 20, 39 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 20, 39 are indefinite for the following reason(s):

 Claim 20 should depend on Claim 19 as opposed to Claim 1 for proper antecedent basis. Claim 39 should depend on Claim 35 as opposed to Claim 25 for proper antecedent basis. Appropriate correction is required.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

requesting information about the target (Figure 4, Col. 3 lines 29 - 43); means for receiving information by the originator from the target in response to the alert (Figure 4, Col. 3 lines 29 - 43), and means for updating information in the originator about the target, based on the received information (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claim 19, Hall teaches an apparatus for sharing user information in a wireless communication network, comprising: a memory unit (Figure 3, Col. 3 lines 9 - 11); a receiver; a transmitter (Figure 3, Col. 3 lines 11 - 15, in order to communicate bi-directionally the wireless communication device (31) must have a transmitter and receiver); and a processor coupled to the memory unit, the receiver, and the transmitter (Cols. 5 lines 65 - 67, 6 lines 1 - 2), the processor being capable of: sending an alert from an originator to a target, the alert including information about the originator and requesting information about the target (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator from the target in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target, based on the received information (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claim 25, Hall teaches a method for sharing user information in a wireless communication network, the method comprising: sending at least one alert from an originator requesting information about at least one target user (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target user, based on information received (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claim 30, Hall teaches a computer-readable medium embodying codes for implementing a method for sharing user information in a wireless communication network (Cols. 3 lines 4 - 15, 5 lines 65 - 67, 6 lines 1 - 2), the method comprising: sending at least one alert from an originator requesting information about at least one target user (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target user, based on the information received (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claim 35, Hall teaches an apparatus for sharing user information in a wireless communication network, comprising: means for sending at least one alert from an originator requesting information about at least one target user (Figure 4, Col. 3 lines 29 - 43); means for receiving information by the originator in response to the alert (Figure 4, Col. 3 lines 29 - 43), and means for updating information in the originator about the target user, based on the information received (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claim 40, Hall teaches an apparatus for sharing user information in a wireless communication network, comprising: a memory unit (Figure 3, Col. 3 lines 9 - 11); a receiver; a transmitter (Figure 3, Col. 3 lines 11 - 15, in order to communicate bi-directionally the wireless communication device (31) must have a transmitter and receiver); and a processor coupled to the memory unit, the receiver, and the transmitter (Cols. 5 lines 65 - 67, 6 lines 1 - 2), the processor being capable of: sending at least one alert from an originator requesting information about at least one target user (Figure 4, Col. 3 lines 29 - 43); receiving information by the originator in response to the alert (Figure 4, Col. 3 lines 29 - 43), and updating information in the originator about the target user, based on the information received (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claims 2, 8, 14, 20, Hall teaches all of the claimed limitations recited in Claims 1, 7, 13, 19. Hall further teaches wherein said sending includes sending a group alert to a group of targets (Col. 3 lines 29 - 43), said receiving includes receiving information from the group of targets (Col. 3 lines 29 - 43), and said updating includes updating information about the group of targets (Cols. 2 lines 1 - 9, 3 lines 29 - 43, in order for the originator (A) to be able to monitor the status of a member or members of a group said originator (A) will update the status information of said member or members upon receiving the PONG message).

Regarding Claims 3, 9, 15, 21, Hall teaches all of the claimed limitations recited in Claims 2, 8, 14, 20. Hall further teaches updating information in at least one target based on information received from the originator (Col. 3 lines 29 - 43).

Regarding Claims 4, 10, 16, 22, Hall teaches all of the claimed limitations recited in Claims 2, 8, 14, 20. Hall further teaches updating information in at least one target based on information received from at least another target in the group (Cols. 2 lines 1 - 9, any group member, which comprises a target, can monitor the status of other group members, which comprises targets, thus any group member has the capability to update the status information of the other group members).

Regarding Claims 5, 11, 17, 23, Hall teaches all of the claimed limitations recited in Claims 1, 7, 13, 19. Hall further teaches wherein said information includes presence information (Figure 17, Cols. 4 lines 8 - 21, 6 lines 54 - 60, on/off is presence information).

Regarding Claims 6, 12, 18, 24, Hall teaches all of the claimed limitations recited in Claims 1, 7, 13, 19. Hall further teaches wherein said information includes location information (Figure 17, Col. 6 lines 54 - 60, L=lunch or M=meeting is location information).

Regarding Claims 26, 31, 36, 41, Hall teaches all of the claimed limitations recited in Claims 25, 30, 35, 40. Hall

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

further teaches wherein said requesting includes requesting information about a group of target users (Col. 3 lines 29 - 43), and said receiving includes receiving information as to whether the group is active or passive (Figure 17, Cols. 2 lines 1 - 9, 6 lines 54 - 60, idle is passive, busy is active).

Regarding Claims 27, 32, 37, 42, Hall teaches all of the claimed limitations recited in Claims 25, 30, 35, 40. Hall further teaches wherein said requesting includes requesting information about a group of target users (Col. 3 lines 29 - 43), and said receiving includes receiving information as to which target user in the group is registered (Figure 17, Cols. 4 lines 8 - 21, 6 lines 54 - 60, if the device is switched on said device is registered).

Regarding Claims 28, 33, 38, 43, Hall teaches all of the claimed limitations recited in Claims 25, 30, 35, 40. Hall further teaches wherein said requesting includes requesting information about a group of target users (Col. 3 lines 29 - 43), and said receiving includes receiving information as to which target user is participating in a current communication session (Figure 17, Cols. 2 lines 1 - 9, 6 lines 54 - 60, idle is passive, busy comprises participating in a current communication session).

Regarding Claims 29, 34, 39, 44, Hall teaches all of the claimed limitations recited in Claims 25, 30, 35, 40. Hall further teaches wherein said requesting includes requesting information about a group of target users (Col. 3 lines 29 - 43), and said receiving includes receiving location information for the target users (Figure 17, Col. 6 lines 54 - 60, L=lunch or M=meeting is location information).

4. Claims 1 - 44 meet the criteria set out in PCT Article 33(2)-(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.